

# High Performance Drill Selection Chart



Our industry leading high performance drill with the same high quality that helped set the standard.



Multipurpose high quality drill for most drilling applications adding stability, hole quality, tool life, and finish (excludes some work hardening materials).



An economical choice perfect for job shop and batch production work requiring a high performance drill option.

Series	Drill Lgth	Size Range Inch	Size Range mm	Margin	D1 Tol.	D2 Tol.	Helix	Point Angle	Coolant Fed	DIN	Coating	Application Recommendations							
												TEMA* Sizes	Steel	Hardened Steel	Stainless Steel	PH Stainless Steel	Cast Iron	Titanium	High Temp Alloys
CXDSS	3X	#31-3/4	3.0-20.0	Double	m7	h6	30°	140°	N	6537K	ALtima® Plus	X	1st	2nd	2nd	2nd	1st	2nd	2nd
CXDSSR	5X	#31-5/8	3.0-16.0	Double	m7	h6	30°	140°	N	6537L	ALtima® Plus	X	1st	2nd	2nd	2nd	1st	2nd	2nd
CXDSSC	3X	#31-5/8	3.0-16.0	Double	m7	h6	30°	140°	Y	6537K	ALtima® Plus	X	1st	2nd	1st	2nd	1st	1st	2nd
CXDSSCR	5X	#31-3/4	3.0-20.0	Double	m7	h6	30°	140°	Y	6537L	ALtima® Plus	X	1st	2nd	1st	2nd	1st	1st	2nd
CXDSSCL	8X	#31-5/8	3.0-16.0	Double	m7	h6	30°	140°	Y		ALtima® Plus	X	1st	2nd	1st	2nd	1st	1st	2nd
CXDSSCE	15X	#31-15/32	3.0-12.0	Double	h7	h6	30°	140°	Y		ALtima® Plus		1st	2nd	1st	2nd	1st	1st	2nd
2XDSS	3X	#31-3/4	2.5-20.0	Single	h7	h6	30°	142°	N		ALtima®	X	2nd	1st	1st	1st	2nd	1st	1st
2XDSSR	5X	1/64-5/8	0.5-16.0	Single	h7	h6	30°	142°	N		ALtima®	X	2nd	1st	1st	1st	2nd	1st	1st
2XDSSC	3X	#31-5/8	3.0-16.0	Single	h7	h6	30°	142°	Y	6537K	ALtima®	X	2nd	1st	1st	1st	2nd	2nd	1st
2XDSSCR	5X	#31-3/4	3.0-20.0	Single	h7	h6	30°	142°	Y		ALtima®	X	2nd	1st	1st	1st	2nd	2nd	1st
2XDSSCL	7X+	#31-1/2	3.0-12.0	Single	h7	h6	30°	142°	Y		ALtima®	X	2nd	1st	1st	1st	2nd	2nd	1st
2XDSSCE	12X-25X**	1/4 - 1/2	5.0-12.0	Double	h7	h6	30°	142°	Y		ALtima®		2nd	1st	1st	1st	2nd	2nd	1st
HPDSSR	5X	#31-5/8	3.0-16.0	Single	h7	h6	30°	140°	N	6537L	ALtima®		3rd	3rd	3rd	3rd	3rd	3rd	3rd
HPDSSCR	5X	#31-5/8	3.0-16.0	Single	h7	h6	30°	140°	Y	6537L	ALtima®		3rd	3rd	3rd	3rd	3rd	3rd	3rd
HPDSSC	3X	#31-5/8	3.0-16.0	Single	h7	h6	30°	140°	N	6537K	ALtima®		3rd	3rd	3rd	3rd	3rd	3rd	3rd
HPDSSCL	3X	#31-5/8	3.0-16.0	Single	h7	h6	30°	140°	Y	6537K	ALtima®		3rd	3rd	3rd	3rd	3rd	3rd	3rd

Note: For drilling applications involving cross holes and/or optimal hole finishes, use the CXD style drill.

\*TEMA - Tubular Exchange Manufacturer's Association

\*\*Length varies depending on size.

Inch	
D1	Tolerance (m7)
.0000 - .1181	+0.0008/+0.00047
.1182 - .2362	+0.0016/+0.00063
.2363 - .3937	+0.0024/+0.00083
.3938 - .7087	+0.0027/+0.00098
.7088 - .7500	+0.0031/+0.00114

Inch	
D1	Tolerance (h7)
.0000 - .1181	+0/-0.00039
.1182 - .2362	+0/-0.00047
.2363 - .3937	+0/-0.00059
.3938 - .7087	+0/-0.00071
.7088 - .7500	+0/-0.00083

Inch	
D2	Tolerance (h6)
.0000 - .1181	+0/-0.00024
.1182 - .2362	+0/-0.00031
.2363 - .3937	+0/-0.00035
.3938 - .7087	+0/-0.00043
.7088 - .7500	+0/-0.00051

Metric (mm)	
D1	Tolerance (m7)
0 - 3.0	+0.02/+0.012
3.01 - 6.0	+0.04/+0.016
6.01 - 10.0	+0.06/+0.021
10.01 - 18.0	+0.07/+0.025
18.01 - 20.0	+0.08/+0.029

Metric (mm)	
D1	Tolerance (h7)
0 - 3.0	+0/-0.010
3.01 - 6.0	+0/-0.012
6.01 - 10.0	+0/-0.015
10.01 - 18.0	+0/-0.018
18.01 - 20.0	+0/-0.021

Metric (mm)	
D2	Tolerance (h6)
0 - 3.0	+0/-0.006
3.01 - 6.0	+0/-0.008
6.01 - 10.0	+0/-0.009
10.01 - 18.0	+0/-0.011
18.01 - 20.0	+0/-0.013

M.A. Ford® Coating	Microhardness (HV)	Maximum Service Temp.	Friction Coefficient
ALtima®	3100	1100° C / 2012° F	0.42
ALtima® Plus	3200	1100° C / 2012° F	0.25

Technical data provided should be considered advisory only as variations may be necessary depending on the particular application.

For product information, call your local distributor.